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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LEYSON, JOSEPH S	

ART UNIT	PAPER NUMBER
1722	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,898	SCHWAIGER, MEINHARD	
	Examiner	Art Unit	
	Joseph Leyson	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-22,24 and 26-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-22,24 and 26-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/17/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 14-20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567).

Griff (Plastics Extrusion Technology, 2nd Edition: see sizing-sleeve method shown in the second drawing from top in fig. 3.7 and described on pp. 57-58) discloses a device for cooling and calibrating plastic profiles, comprising a housing having an entry opening and an exit opening for a profile (from the die) to be processed; a sleeve (the sizing sleeve) disposed within the housing which connects the entry opening and the exit opening and encloses a passage essentially corresponding to the outer contour of the profile and containing the profile to be guided, said sleeve completely surrounding the profile inside the device; a vacuum system (see "vacuum" in second drawing of fig. 3.7; p. 57) for generating a vacuum in the gap between profile and sleeve, which is connected to small openings provided in the sleeve; and at least one interior space which is filled with a cooling medium during operation of the device and is provided with an inflow opening and an outflow opening for cooling medium such that a flow of the cooling medium can be generated in the interior space; wherein the sleeve includes at

least one thin-walled section separating the passage from the interior space, and openings are positioned in this section which connect the passage and the interior space. The perforated inside surface of the sleeve provides openings (note that these openings would be located primarily in areas corresponding to visible areas of the profile, namely the outer surface of the profile). However, Griff does not disclose the vacuum system including a vacuum means connected to said outflow opening.

Recknagel (US 3,804,567) discloses a device for cooling and calibrating plastic profiles, comprising a housing 4; a sizing sleeve 5 which encloses a passage essentially corresponding to the outer contour of the profile and containing the profile to be guided; a vacuum system (i.e., water pump 8, 9; col. 2, lines 37-46) for generating a vacuum in the gap between profile and sleeve, which is connected to small openings (the porous openings of the sleeve) provided in the sleeve; and at least one interior space which is filled with a cooling medium during operation of the device and is provided with an inflow opening 11 and an outflow opening 12 for cooling medium such that a flow of the cooling medium can be generated in the interior space; wherein the vacuum system including a vacuum means 8, 9 connected to said outflow opening 12.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Griff such that the vacuum system includes a vacuum means connected to the outflow opening because such a modification is well known and conventional in the art as disclosed by Recknagel (US 3,804,567) and would provide an art recognized alternative configuration for providing vacuum in the housing and for outflowing the cooling medium. Note that the configuration of Recknagel (US

3,804,567) has the benefit providing the outflow of cooling medium and providing vacuum, both through only one outlet of the housing. As to the dimensions of the device as recited by instant claims 15-20, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with the dimensions of instant claims 15-20 because where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

3. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567) as applied to claims 14-20 and 28 above, and further in view of Takahashi (U.S. Patent 3,668,288).

Griff (Plastics Extrusion Technology, 2nd Edition) and Recknagel (US 3,804,567) disclose the device substantially as claimed, as mentioned above, except for an air feeder opening, as recited by instant claims 21 and 22.

Takahashi (U.S. Patent 3,668,288) discloses at least one coolant liquid or air feeder opening (i.e., one or more of 56d1, 56d2, etc.), in addition to other openings (i.e., the other of 56d1, 56d2, etc.), which communicate with a coolant supply source via a feeder line (i.e., 57d1, 57d2, etc.) and a valve (i.e., fig. 4; col. 9, lines 48-62). If the

profile does not have to or must not be cooled quickly, coolant air may be introduced from its supply source (i.e. col. 10, lines 45-47).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with at least one coolant air feeder opening, as disclosed by Takahashi (U.S. Patent 3,668,288) because such a modification would enable the device to cool profiles which do not have to or must not be cooled quickly.

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567) as applied to claims 14-20 and 28 above, and further in view of Kessler (U.S. Patent 4,181,487).

Griff (Plastics Extrusion Technology, 2nd Edition) and Recknagel (US 3,804,567) disclose the device substantially as claimed, as mentioned above, except for the housing and sleeve consisting of a plurality of parts, as recited by instant claim 24.

Kessler (U.S. Patent 4,181,487) discloses a device for cooling and calibrating profiles which includes a plurality of parts 34 for interchangeability and for cleaning, the parts 34 having partitioning faces parallel to the longitudinal extrusion direction (i.e., fig. 2, col. 5, lines 23-35). Note that applicant discloses (instant specification p. 5) that parts having partitioning faces parallel to the longitudinal extrusion direction can be disassembled during operation.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the housing and the sleeve to consist of a

plurality of parts, as disclosed by Kessler (U.S. Patent 4,181,487) because such a modification would enable interchangeability and cleaning of the device. Furthermore, it is well within an artisan of ordinary skill to make an integral structure separable, Howard v. Detroit Stove Works, 150 U.S. 164; Nervin v. Erlichman, 168 USPQ 177.

5. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567) as applied to claims 14-20 and 28 above, and further in view of Racioppi et al. (U.S. Patent 5,943,756).

Griff (Plastics Extrusion Technology, 2nd Edition) and Recknagel (US 3,804,567) disclose the device substantially as claimed, as mentioned above, except for the plurality of housings, as recited by instant claim 26.

Racioppi et al. (U.S. Patent 5,943,756) discloses a device for cooling and calibrating profiles which includes a plurality of housings 10-16 on a common plate 18 one behind the other and aligned in longitudinal direction enabling changeover (i.e., col. 2, line 63, to col. 3, line 15).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with a plurality of housings on a common plate one behind the other and aligned in longitudinal direction, as disclosed by Racioppi et al. (U.S. Patent 5,943,756) because such a modification would enable changeover.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567) as

applied to claims 14-20 and 28 above, and further in view of Preiato et al. (U.S. Patent 5,340,295).

Griff (Plastics Extrusion Technology, 2nd Edition) and Recknagel (US 3,804,567) disclose the device substantially as claimed, as mentioned above, except for a self-priming water pump, as recited by instant claim 27.

Preiato et al. (U.S. Patent 5,340,295) discloses a self-priming water pump 38 connected to an outflow of a vacuum sizing apparatus which enable flow of water therein (i.e., figs. 3-4; cols. 3-5).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further replace the water pump (8, 9) with a self-priming water pump because such a self-priming water pump is well known and conventional in the art as disclosed by Preiato et al. (U.S. Patent 5,340,295) and would an alternative means for enabling flow of the cooling medium.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griff (Plastics Extrusion Technology, 2nd Edition) in view of Recknagel (US 3,804,567) as applied to claims 14-20 and 28 above, and further in view of SU 1224162.

Griff (Plastics Extrusion Technology, 2nd Edition) and Recknagel (US 3,804,567) disclose the device substantially as claimed, as mentioned above, except for slits and bores, as recited by instant claim 29.

SU 1224162 discloses a sizing sleeve (i.e., fig. 1) including openings 7, 11 configured as slits on the interior wall of the sleeve, and the slits communicating with the outside of the sleeve via bores 10.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the sleeve with slits on the interior wall of the sleeve, wherein the slits communicate with the outside of the sleeve via bores because such a modification is well known and conventional in the art, as disclosed by SU 1224162, and would provide an art recognized alternative sizing sleeve to the device.

8. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL

TIM HEITBRINK
PRIMARY EXAMINER
GROUP 130

8-6-07